

members may have precedence), and geographic area options 713-4 (e.g., emergency messages generated by the authorized entities from a particular area may have precedence).

5     **[0050]**     Continuing to refer to FIG. 7, the exemplary subscriber notification profile 700 further comprises executive override options 714 wherein the network can supersede any prevailing restrictions with respect to emergency message delivery.     Additionally, various  
10    emergency-type options 716 may also be included in the subscriber's emergency notification profile, which may preferably be provided as policies and preferences based on certain types of emergencies that can interact with one or more options already described hereinabove.

15    **[0051]**     Those skilled in the art should realize upon reference hereto that the emergency notification profile 700 described herein is illustrative only. Accordingly, both the contents and specific implementation of a subscriber profile database may vary depending upon the  
20    objectives of a particular application. It should therefore be recognized that the scope of the present invention is not circumscribed by the specifics of a subscriber profile database in any manner.

25    **[0052]**     FIG. 8 is a flow chart of the steps involved in an exemplary emergency notification scheme of the present invention. Upon receiving an incoming emergency message from an authorized entity at a node serving the

subscriber (step 802), a multimedia call session engine is invoked by the serving network node disposed in a service network structure (such as, e.g., service network arrangement 500 depicted in FIG. 5) to launch a call treatment application with respect to the incoming emergency message (step 804). The incoming emergency message may preferably include parametric information comprised of, for example, emergency type, magnitude of the emergency, target area to be served, geographic area information relating to the message originator (i.e., authorized entity), and the like. In some embodiments, the parametric information may also include one or more indicia to identify override criteria with respect to the incoming emergency message. The call treatment application's service logic is operable to query the subscriber profile database based on the parametric information in the incoming emergency message (step 806). Responsive at least in part to the results obtained from the database query, a determination is made thereafter with respect to a particular emergency alert scheme to be provided (step 808). A further determination may be made in order to verify if any override options are applicable and/or effective (decision block 810). If so, an emergency notification in accordance with the applicable override options is delivered, wherein the notification scheme includes an appropriate combination of a select alert transmission mode as well as the device (step 814). If no override options are applicable, the emergency

notification is then delivered in accordance with the selected alert transmission mode and device combination, after appropriately resolving any interactions involving scheduling options, type options, severity options, et  
5 cetera (step 812). In either case, a subscriber-selectable device is actuated for effectuating an appropriate emergency notification alert. In one presently preferred exemplary embodiment, at least a portion of a suitable multimedia-capable interface (e.g.,  
10 multimedia interface 600 described hereinabove) may be actuated for delivering the notification alert.

**[0053]** Those skilled in the art should therefore appreciate that emergency notification of the present invention can be based on: (i) privilege/authorization  
15 level of the calling party, (ii) nature of notification and criticality/nature of emergency, (iii) preference identified by the called party (i.e., the subscriber), and (iv) active devices available for notification. In one implementation, the privilege level can be  
20 established by "operator verification," alluded to in the foregoing description. Also, subscription for the privilege level may be identified/verified by entering a PIN, or verified by the system (e.g., a VPN can maintain manager-employee privileges) or an appropriate  
25 governmental agency. Further, in some other implementations, the subscriber's preferences may also include a "disallow" feature, wherein notification is not allowed based on certain conditions (e.g., calling party

not verified, method of notification not acceptable at the time of notification, et cetera). In addition, a sequence of events (event flow) may be specified such that where a particular alert event fails with respect to  
5 a notification, a different alert event may be effectuated therefor.

**[0054]** Moreover, the emergency notification service of the present invention may be provided with interaction with certain other services. For example, call waiting  
10 or call forwarding services may be coupled to various emergency notification schemes in accordance with pre-defined service options in a subscriber's profile. Additionally, notification may be provided to multiple locations and/or devices in yet further exemplary  
15 implementations of the emergency notification service. Status notification can also be given to the calling party or entity (e.g., where no call is set up between the calling and called parties).

**[0055]** FIG. 9 is a flow chart of the steps involved in an exemplary methodology for directing an emergency  
20 message towards an intended recipient (e.g., a subscriber) by an authorized individual. When an individual attempts to place an emergency message for transmission in the service network, a verification and  
25 authentication process may be effectuated by the network itself or by means of subscriber-based authentication (step 902). Upon successful user verification, an emergency message with appropriate parametric information

is generated (step 904). An emergency message path is established to the subscriber terminal without disrupting any current connections that the terminal may be engaged in (step 906). In one embodiment, the emergency message path comprises a one-way transmission path initially and, upon validation by the intended recipient, a full duplex path may be established. Thereafter, the emergency message is delivered in accordance with the notification profile as described hereinabove (step 908).

10     **[0056]**     Referring now to FIG. 10, shown therein is a flow chart of the steps involved in an exemplary methodology for directing an emergency message towards a subscriber by an entity. In one embodiment, the entity is operable as an authorized agency to place public emergency messages in the service network and, accordingly, it may not be necessary to effectuate an express verification scheme prior to emergency messaging. In a further embodiment, the entity may be a business enterprise attempting to effectuate an emergency messaging service over a virtual private network (VPN) that forms a portion of the service network. Upon obtaining appropriate approval, a suitable "public" emergency message is generated for dissemination over a target area served by at least a portion of the service network or over the VPN portion (step 1002). As alluded to hereinabove, the emergency message may include applicable parametric information for facilitating customizable delivery thereof.

[0057] In one exemplary embodiment, the emergency message may be transmitted in broadcast mode to the target serving area (step 1004). The serving node associated therewith is operable to launch call treatment applications for the subscribers in the target area to determine appropriate notification schemes. Responsive thereto, the emergency message is delivered to the served subscribers in accordance with the individual subscriber profiles depending on the various service options (step 1006).

[0058] Based upon the foregoing Detailed Description, it should be readily apparent that the present invention advantageously provides an enhanced emergency message notification service using multimedia within the context of a next-generation network. By architecting the service as part of a decoupled application layer with open protocols and APIs, not only can service interoperability with different network elements and platforms be ensured, but service rollout can be streamlined as well for faster delivery. Furthermore, the emergency notification service of the present invention provides several advancements and improvements over the conventional schemes. For example, because the notification modes can be customized based on a host of features and options, it is possible for the subscriber to discern more about an incoming emergency. By specifying the various alert modes and scheduling options in accordance with the teachings hereof, the subscriber

can ensure that an emergency alert reaches him or her with greater probability. Moreover, the multimedia features of the emergency notification service of the present invention provide a more enriched notification experience than the conventional emergency schemes.

5       **[0059]**     It is believed that the operation and construction of the present invention will be apparent from the foregoing Detailed Description. While the system and method shown and described have been  
10     characterized as being preferred, it should be readily understood that various changes and modifications could be made therein without departing from the scope of the present invention as set forth in the following claims.